Benelli International

The only magazine in the world devoted to the bikes from Pesaro.





#1

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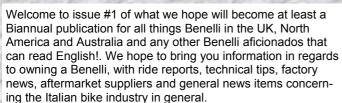
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Being a one man band at the moment, I invite any fellow Italian bike riders to send us in any stories, news and pictures they think we may be interested in, although this newsletter is primarily about Benelli's, we are quite happy to print anything with a Italian flavour!

We have managed to pack this issue with news on the upcoming 1000cc V6 Tornado replacement and the newly unveiled Due 756 naked bike. BX 450 motocross machine and the 50cc scooter. We have an exclusive interview with the ex Benelli works rider from 2001 and 2002, Australian Peter Goddard and we chat to the vice president of Benelli QJ, Pierluigi Marconi. Also in this first issue with have a brief riding impression of the new Benelli's for 2007, the eagerly awaited 1130cc Tornado and the all new Tre-K, which come courtesy of the UK magazine, Motorcycle News and the USA based Motorcycle.com web site. UK publication www.superbike.com.uk supplied the re-printing of the 1130 tornado test to give us a idea of what we can expect to see in the upcoming year.

We also have packed this issue with technical answers and advice to help out the owners of the early Tornado's and TnT's. which like most new bikes new to the market from a small manufacturer, have had their teething problems. We also list some of what is available from the Benelli factory to dress up your Tornado and TnT. The new range of "Benelli Officine" accessories include clothing and equipment. We also list some other aftermarket supplier's of things for Benelli's and we invite anyone who sells equipment for the bikes to contact us at Benelli International so we can inform our readers.

With plenty of new and exciting things happening at the factory in Pesaro, the future looks bright for Benelli and the motorcycle community as a whole, so enjoy hopefully what is the first of many more editions to come and visit us on www.benelliforum.com and join the growing Benelli family!



Many people around the world contributed to this very first issue, The Australian Benelli Team would like to thank in no particular order; my Wife Michelle, my son Xan, my family and friends, Errol Kewold for his vast knowledge of things Benelli, John Orchard, Ed Salomons, Paul Nobbs, Steve Pasqualin, Glynn Kerr, Adrian Morton, Peter Goddard, Taksil Dias, Vince Nolan, Arnaud Decotter, Peter Spindlow, Elayne Kelly, Jakko Hätinen, Pegaso from Italy, Johnny Rotten from the UK, Jeremy Bowdler from Two Wheels magazine for his help with printing tips and my bothersome enquiries, onya Jeremy, Jeff Ware from Rapid Bikes magazine, Matthew Shields from Australian Motorcycle News. Marti and Nicko, thanks for the tips Smarts!, AGirl from Arizona in the USA, and all the members of Roland Lee's world wide Benelli forum located at www.benelliforum.com who has made it possible for Benelli owners around the world to have a home. thanks Roland, even though you don't own a Benelli yet, the Duke is forgiven!, the crew of www.italobikes.de, the boys at www.sliders.it ,keep up the good work, all the members of www.perthstreetbikes.com's Moto Italiano section, who keep up the Italian passion in West Australia, the West Australian Riders (WAR) who have kept the editor entertained, informed and amused for many years, and last but not least, any people out there who are or will become members of the family that comes with owning one of the bikes from Pesaro!



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Pesaro Pulse



Arh, so that's what happened to all those dodgy re-setting clocks, what's that, you have solved the problem, no, really.. no seriously?.. really!

Mmmmmm, I'll take that one, and those two over there.

Workshop manual anyone ?

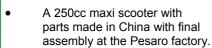
The latest tit-bits to come out of Pesaro comes from the staff of UK publication MCN, on a recent tour through the factory for a test ride of the Due 756 the reporters revealed that the latest treat in Store for Benellista was that work has commenced on the new Tornado, although we have no news on the release date of the bike it seems as if it will be destined for possible WSK duties and will be running a 1000cc V6!

According to recent statements in the press the massive \$90 million AUD investment by new Benelli Owners Qianjiang, that has flowed into the Pesaro facilities recently (with more to come) the factory is planning on a serious assault of becoming one of the most exciting motorcycle manufacturers in the global market. Benelli has not had the long running tradition of only using certain engine formats, like Ducati and MV Agusta. With a history of singles, twins, inline sixes and triple's its interesting that Benelli now has plans or prototypes undergoing testing as singles, twins, triples, a planned inline four and a 1000cc V6 currently on the test bench!, Some of the projects in the pipeline include

- The new V6 Tornado. Although we are not sure if it will be a Tornado evolution of completely new machine and if indeed it will retain the Tornado's novel and very effective cooling system.
- An mind blowing Turbo TnT with a output of 200bhp.
 - A factory backed campaign in the Would Superbike Championship for 2009.



On the subject of the re-setting clock issue, Errol, our resident tech guru, fondly referred to as "Moses" has come up with a UPS (un-interruptible power supply) gadget that will solve the problem once and for all, look in our tech section for further details. So just what is it with Italian bikes and electricity?



- The Pepe and 591 scooters reentering production for 07.
- A 600cc inline four sportsbike to compete with the big four Japanese machines.
- A parallel twin cylinder naked bike for late 07 / early 08 release called the Due 756.
- A range of new dirt bikes with motocross, enduro and motard versions available.

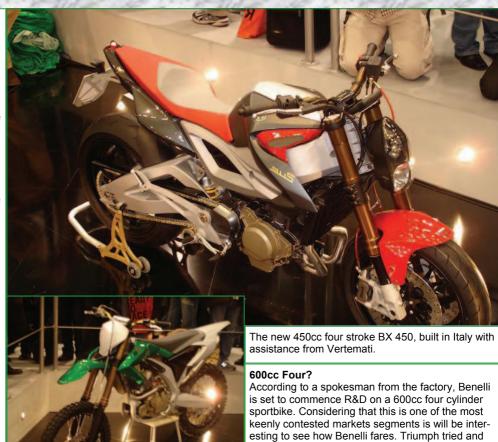
So read on the following pages of the projects in the pipeline at the factory and of the bikes already undergoing testing for production for the 2008 models year plus the bikes will can expect to see during 2007.



The latest news concerning Benelli at the recent Intermot show has been the recent unveiling of a suite of new models. Intermot revealed a new range, of which 3 models were unveiled, a completely new 756cc parallel twin cylinder bike called the Dué, a 450cc single cylinder four stroke motocross bike called the BX (Benelli is using technical advice from the Vertemati brothers to develop its off road machines) and a new 50cc Scooter called the 49X. For 2007 the Australian importers are bringing in the Tornado 1130, which hopefully will be on sale by the time you read this, the standard TnT, TnT Café racer along with the new for 07 TnT Sport Evo. The Evo appears to be the same specification as the normal Sport etc for a rear seat cover, belly pan and seat cover in red on the black model, According to Stoney Creek Powersports (Australian Benelli Importers) CEO Paul Nobb's, Australia will only see the the black with red frame Evo, The Café Racer still in gold and the Base TnT available in black, red and yellow.

Also production of the TnT Titanium commences in the second guarter of 2007 with the top of the range Ti being a order only model for Australia, but with the extensive list of equipment of the Titanium we hopefully may yet see one land in Australia for the approx rrp of about \$33 to \$35K. The Specification sheet lists the full titanium exhaust system, an exposed dry slipper clutch, carbon coated 50mm Marzocchi forks, A RS spec Extremetech rear shock absorber featuring both high and low speed compression damping, forged Marchesini alloy rims, magnesium sump, adjustable billet rear sets, and possibly a slightly higher power output over the normal TnT. This looks set to elevate the Titanium model to the top of the naked bike list..

The All new for 2007 Tre-K is also just reaching dealer's in the UK and North America, and are likely to be on sale soon in Australia once ADR compliance testing is completed. Read the article from UK magazine MCN (Motorcycle News) inside to see what potential Aussie purchasers are in for once the Tre-K hits our shores. With the highest power figures for its class and sharing the same handling characteristics as it's TnT siblings its sure to be a contender for best in the new "All Roads" category that also includes the new 1050cc Triumph Tiger, 1100cc Ducati Multistrada and various Japanese models. Benelli is also due to release a more off road orientated version of the Tre-K later this year with the release of the "Amazonas" which will feature adjustable forks, spoked rims, and greater ground clearance. It will be interesting to see how the Amazonas fairs when the Benelli importers in Brazil take it across the Amazon for its pre production trial run!



The new Due has recently been voted winner of the open category at the recent Motorcycle design Association Awards, Featuring a fully cast one piece aluminium frame and 900RS running gear the Due should be a good handling bike in the hills and promises to have the recipe of more chassis than power, allowing its rider to fully push his riding skills without finding his or herself in a place outside of their respective abilities. A 600cc version of the bike is reputed to be in the R&D stages too.



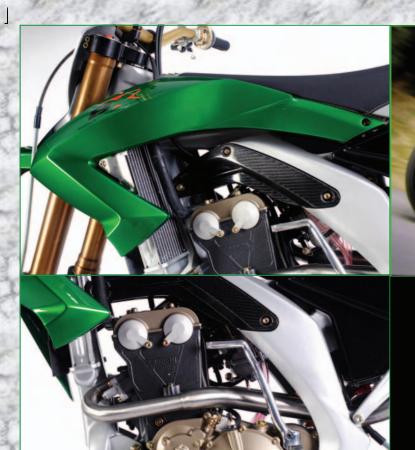
The New Due 756 looks to have the classic good handling attributes of long swingarm, compact motor and quality brakes and suspension, It has been noticed that it's a little on the smaller side, ideal for younger and lady riders . Pictures supplied from Pegaso in Italy and Roland Lee from the USA

The new Due, running a 756cc parallel Twin Motor, puts out a claimed 85 bhp.

failed with a 600c 4, and turned to a 675cc triple to

capture the middleweight crown.









Here are some photo's of the new Vertemati / Benelli motocross machine. Dubbed the BX450, the bike should prove to be competitive straight out of the crate, The Vertemati brothers, who previously were responsible for the VOR range of Italian off road machines before selling VOR and starting their Vertemati concern, are well known for producing powerful, fine handling machines with components from some of the best know suppliers in the off road scene. The bikes certainly look very stylish with die cast frames, carbon fibre frame components and twin, slash cut mufflers existing under the riders seat. The traditional Benelli racing colours of silver and green giving the machines an appealing look. Their have been recent reports that we will see these machines in a variety of capacities of between 450cc to 550cc in motocross, enduro and road going motard form by the end of 2007. We look forward to bringing you a report just as soon as we can. With the dirt bike scene exploding around the world and with BMW set to release an advanced 450cc off road machine for release in 2008 and the recent release of Aprilia's highly rated 450cc and 550cc v-twin off road machine the choices offered to off road riders is becoming quite daunting. A list of manufacturers includes the big Japanese four, KTM, Husqvarna, TM, Sherco, BMW, Aprilia and many more I'm sure!



For 2007 we see the new TnT Sport Evo and the highly popular Café Racer continuing in production, with photo's of the 2007 models on the following pages along with the new 1130cc Tornado which is pumping out a healthy 165hp on dynos and the some simple tuning there are reports out of Germany of the new Tornado's pumping out 180+ on the same dyno once fine tuning has been done.

With the new TnT Titanium we also get to see the sort of accessories the factory will shortly have available for existing TnT owners to purchase separately to customise their machines. Enjoy!.

On the TnT and Tre-K front we can also expect to see 900cc versions of the bikes appearing. Featuring re-tuned Tornado motors, with more power shifted from the higher rev ranges to the mid range to improve versatility. The new 900cc bikes look like they will be popular with people who don't necessarily want the arm wrenching power that the 1130cc engined bikes are producing



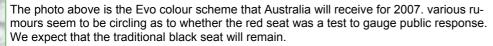














The Editor managed to catch up with ex GP and Superbike rider of the eighties and nineties and 00's, Peter Goddard. Peter has ridden 500cc two stroke GP machines and numerous manufacture's 750cc, 1000cc and 900cc superbikes, and is considered to be one of the best R&D riders in the business, a opinion confirmed when Peter was chosen to develop both the Aprilia Mille 1000cc Twin in SBK in 1999 and the Benelli Tornado 900cc triple back in 2001 and 2002. Benelli Oz catches up with Peter and bangs him a few questions just after his recent appearance at the Phillip Island round of the superbike championship, where Peter appeared in the Legends parade alongside such track greats as Aaron Slight, Rob Phillis, Fred Merkel and Kevin Magee to help celebrate the 20th year of the World Superbike Championship.

1/ I understand you're an Ohlin's Suspension Technician now? Whereabouts are you working and do you still get on the racetrack every now and then, or just the road, and if so what do you have in the garage now?

Yes I work for Ohlin's Racing AB as WSBK Supervisor and Technician for PSG1 Kawasaki & Suzuki Germany. I also do track testing for production and racing material which is a fun way to get back on the track. In my garage I always keep an enduro bike for training, now I have a Husqvarna 450TE which I really like!

2/ The last I heard you had just become a father to a little girl, still just the one?, and how is life as a Dad? Yes I am a very proud father with Daughter Demi 5yrs and Beau 4yrs, and lovely Wife and Mum Kim. 3/ You were a very highly regarded racer in the 90's and into the new century, what would you say was the highlight it your racing career?

Each Championship is naturally a highlight, 2 Australian Superbike, 1 Japanese GP1, 1 World Endurance but I would of loved to have the opportunity to get such results in WSBK and or MotoGP.

4/ So far your raced the following bikes;
Moriwaki superbike,
Yamaha superbikes,
ROC Yamaha 500cc GP bike, Suzuki 500cc GP bike, Suzuki 500cc GP bike, Superbikes and endurance racers from Suzuki and Kawasaki. Plus you debuted the Aprilia Mille Superbike, and the Benelli Superbike



Peters Ex works bike as it appeared at a UK bike show. Utilizing gear driven cams instead of the production tornado's chain, Titanium conrods and a dry clutch as opposed to the 900cc production bikes wet clutches and steel con-rods the works racer put out 163 efficiency of the rear underseat mounted was proven correct in the heat of WSK competition when the Tornado ran some 10 to 15 degree's cooler than the opposition with no under seat extractor fans fitted!

Shown at http://www.sportbikes.dhs.org

Which bike would you say you enjoyed the most? I thoroughly enjoyed all my racing bikes, but the teams are what make it more enjoyable and successful, Team Hayashi Japan, Team Suzuki Australia, SERT France and Aprilia all carry great memories!

5/ When first approached By Andrea Merloni to race and develop a completely new motorcycle what were your expectations and what did you think of the machine the first time you rode it?

I went there with a good strong group from Aprilia so it looked very promising, however the situation was changed by a dominant project leader so the potential was lost.

6/ You also raced the Aprilia Mille back in 199, in the bikes maiden season, how would you compare the two bikes?

Very similar in that the chassis's got developed to a good level but the engines were the weakest points, Aprilia went onto develop there's into a championship contender but not Benelli unfortunately.

7/ Benelli pulled out of racing at the end of the 2002 season, do you think with more development time the bike could have been a title challenger? After reading a 2002 test of the SBK racebike penned by Alan Cathcart, he suggested that the bikes biggest holdback was the weight, but the power and handling were very good.

The engine was the weak point not doubt, it was designed to be a 1100, just with reduced stroke so bore stroke ratio and conrod length were incorrect.

8/ Benelli also made a limited production run of the Benelli Tornado, called the Goddard replica, although Australia never received any, How's it feel to have a bike named after you, and did they give you a freebie ©

I don't think Benelli actually made a replica named after me; the German Importer did more on that front, I never received a bike, or remuneration and Benelli still owe me and many others remuneration for 2002.

9/ If you could have any bike it your garage, what would it be?

KTM900

10/ Did you ever get to ride the road going Tornado?

Yes!

11/ Who do you tip to win this Years SBK championship and Moto GP title?

Superbike – Toseland from pre-session testing. GP – Valentino cause he knows how.

12/ For all the young racers out there, that dream of hitting the international circuit, what advice do you have for them?

No matter how good you are, the team and machinery will make your success!

13/ The magic question, have you any bike bits leftover from the SBK factory efforts, and if so, can I have them ©

I am fortunate to have one suit and helmet from every year I raced, the rest is gone sorry!





Two views of the Goddard special Tornado, build from the LE (Limited Edition) bike, the Goddard replica are limited to a production run of ten machines from the LE production runs of 150 bikes, surely one of the rarest Benelli's ever built. Sadly none of this magnificent machines made it to Peter's homeland, with Australian only receiving 2 of the standard LE machines, of which one is currently for sale on www. Bikesales .com.au for approximately \$25,000.00. Quite a saving over the initial L.E. recommended retail sticker price of \$65,000.00!





Pete and the Ohlin's technicians at left, with Pete on the far right, and his family above. The kids certainly seem to be enjoying their mini bikes in the team pit area!

THE VICE PRESIDENT.

WE SPEAK TO BENELLI VICE PRESIDENT, PIERLUIGI MARCONI, AND FIND OUT THE LATEST INSIDE NEWS FROM THE WORKS AT PESARO

1/ Hello Pierluigi, The future is now looking a lot rosier at Benelli now that that the new owners have revitalized the company. What is the atmosphere like around the Pesaro premises now?

VERY GOOD, BECAUSE THE NEW OWNERSHIP DIDN'T WANT TO CHANGE THE USE TO DO OF THE EMPLOYERS, WE ARE STILL AN ITALIAN COMPANY WITH AN ITALIAN STYLE.

THEY UNDERSTOOD THAT BENELLI ,TO KEEP BEING ITALIAN, HAS TO BEHAVE ITALIAN.

2/ Just recently we have heard rumours of the new Tornado, rumoured to run a 1000cc V6, will be bike be a re-engined evolution of the current Tornado, or a completely new superbike?

THIS IS A PROJECT WICH IS NOW IN PROGRESS, BUT IT CONCERNS THE NEW COMPANY "BENELLI MOTORI". THIS COMPANY ONLY MAKES MARINE ENGINE, SO IT IS A MARINE ENGINE PROJECT.

3/ The new Due 756 twin was designed post Adrian Morton leaving to work with Tamburini at MV, can you tell us a bit more about the new designer working at Benelli?

ACTUALLY THE SENIOR DESIGNER FOR BENELLI IS THE SPANISH CARLES SOLSONA.

HE'S A GREAT DESIGNER, A FANTASTIC PERSON, AND HE WORKS VERY WELL WITH THE TECHNICAL OFFICE OF BENELLI. ANY WORD I CAN TELL YOU, WILL BE NOT ENOUGH TO EXPLANE HOW BIG IS THE IMPROVEMENT WITH THE NEW DESIGN DEPT.

CARLES IS GIVING TO THE BENELLI BIKES A REAL FAMILY FEELING, HE'S INNOVATING THE PRODUCTS WITHOUT LOOSING THE CONNECTIONS TO THE PAST.

WE ARE VERY HAPPY TO HAVE CARLES HERE IN PESARO.

4/ The new Due looks to offer a good brake and suspension package, essentially Tornado running gear and a new compact evolution of the Tornado/TnT motor, so the bike should be a good machine in the curves and appeal more to shorter people and women who traditionally have found the Tornado a bit high, Have you rode the bike and can you give us your opinion on it, and give us an idea of when we can expect it in the showrooms?

UNFORTUNALLY WE ARE HAVING FEW DELAYS, THE PRODUCTION WAS SCHEDULED FOR NOV-DEC 2007, BUT BECAUSE OF SOME SUPPLIERS DELAY WE WILL START THE PRODUCTION IN FEB-MAR 2008. SO, FOR THE NEXT SPRING YOU WILL SEE THE DUE ON THE DEALERS SHOWROOMS.

5/ Can we honestly expect to see a Turbo TnT?

MAYBE YES, MAYBE NOT TURBOCHARGED BUT SUPERCHARGED. WE ARE STILL WORKING ON IT. WE ONLY WILL PRODUCE THE BIKE IF WE HAVE A CONSISTENT ADVANTAGE IN COMPARISON TO THE 1130 ENGINE TUNED-UP.

6/ Benelli debuted the BX450, have Benelli acquired the Italian off-road company Vertemati, and if so can we expect to see a rapid expansion in Benelli's motorcycle range with MX, Enduro and Supermotard Benelli off-road machines in the coming years?, Are the new off-road range being made in Pesaro or continuing at the Vertemati premises

IS IMPORTANT TO SAY THAT BENELLI DIDN'T ACQUIRED VERTEMATI, SIMPLY THE VERTEMATI BROTHERS ARE CONSULTANT FOR BENELLI. WE DO NOT HAVE AN OFF-ROAD BACKGROUND, THAT'S THE REASON WHY WE NEED TO BE HELPED. AND THE VERTEMATI BROTHERS ARE MAKING THIS.

BENELLI WILL INDUSTRIALIZE THE PRODUCT AND WILL PRODUCE THE BX449 IN ITS FACILITIES.

ON THE NEXT SHOWS WE WILL INTRODUCE THE TWO MORE VERSIONS OF THE BX449, THE ENDURO AND THE MOTARD.

7/ The last I heard was that the factory was going to expand into new bigger premises to allow for new production targets, Is the new factory up and running?

NOT YET, THE NEW BUILDING IS IN OUR PLANS BUT IN A COUPLE OF YEARS.

8/ With the manufacturing and assembly of engines now done in-house and new tech machinery having been purchased, can we expect greater quality than what owners received with the early 2003 tornado engines?

ABSOLUTELY YES, THIS IS ONE OF THE MAIN REASON WHY WE MADE THIS CHANGING.

CHECKING PERSONALLY THE ENGINE ASSEMBLING MAKES THE PROCESS MORE RESPONSABLE, AND AUTOMATICALLY MAKES IT BECOMING A HIGHER QUALITY PROCESS.

9/ You have worked at Bimota, a sacred manufacturer for a lot of riders, and Aprilia, Now Benelli, How are the brands different?, and can we expect to see Pierluigi becoming a long term figure with the history of Benelli?

I HOPE TO BECOME! I'M HERE SINCE SEPTEMBER 2001, AND DURING THESE YEARS WE PASSED THROUGH MANY PROBLEMS, NOW WE ARE HAVING A NEW MANAGEMENT AND THE PAST SEEMS TO BE FAR AWAY.

THE DIFFERENCE BETWEEN THE THREE BRANDS IS VERY CLEAR AND EASY TO EXPLANE.

BIMOTA WAS A SMALL COMPANY WERE EVERYTHING WAS POSSIBLE TO DO, NEW PROJECTS, INNOVATIONS, AND WHY NOT, PROVOCATING MOTORCYCLES. IT WAS POSSIBLE BECAUSE BIMOTA WAS A SMALL COMPANY VERY FLEXIBLE A REACTIVE. THE ONLY PROBLEM HAS BEEN THE FINANCIAL COVERAGE, THIS WAS THE ONLY LIMIT FOR BIMOTA, SO EVERYTHING COULD BE POSSIBLE, BUT IN THE END NEARLY NOTHING!

APRILIA WAS EXACTLY VICEVERSA, BIG COMPANY WITH A BIG POSSIBILITY OF INVESTMENTS BUT VERY SLOW IN REACTIONS AND VERY CAREFUL AND PRUDENT FOR INNOVATIONS. TO DO A NEW BIKE IN APRILIA, WE HAD TO DEVELOP THE PROJECT IN TWO/THREE YEARS.

BENELLI IS THE RIGHT COMPROMISE, SMALL ENOUGH TO BE FAST AND FLEXIBLE ON THE DEMANDS, AND WITH THE APPROPRIATE FINANCIAL SUPPORT. THE LATEST MOTORCYCLES WE SHOWN AT THE FAIRS ARE THE RESULTS.

10/ For your thesis in mechanical engineering you designed the swing arm front suspension that debuted in the Bimota Tesi back in the 1990's, A bike some say was way ahead of its time and that the technology of the day could not fulfil the expectations the design offered, How does it feel to see a decade later that technology improvements in materials (and more R&D dollar's that was always a problem for a small manufacturer like Bimota) have been fully realised and that the Vyrus 2v and 4V along with the reborn Tesi 3V being lauded by the press and riders alike?

SINCE THE BEGINNING OF THE PROJECT, IT DOESN'T SEEMS THAT SOMETHING REALLY CHANGED, THE TESI MODELS ARE STILL THE SAME, JUST FEW PARTS ARE DIFFERENT, BUT BASICALLY THE BIKE IS THE SAME. THE LIMIT OF THE PROJECT AT THE MOMENT IS THE FRAME ARCHITECTURAL AND THE ENGINE. DESIGNING A NEW ENGINE EXCLUSIVELY FOR THAT PURPOSE WILL BE THE SECRET TO MAKE THE TESI DOING A BIG STEP FORWARD.

11/ As an aside, back in 1996 I was on holiday in Italy, and I made it a mission to visit the Bimota factory. Unfortunately I happened to arrive during noon nap time and the factory was deserted , I was admiring the bikes lined up for dispatch when you showed up and introduced yourself to the scruffy Australian in a tee shirt.! You had just shipped out the V'Due 500 for its world unveiling the day before and I missing seeing it, and you showed me around the race shop with the Australian mechanic at the time, when the factory was racing the SB7 in the Italian championship's, unfortunately Bimota owner has eluded me so far, although the Tornado RS more than makes up for it. Out of all the bikes you have worked on and developed, which one is the most special for you

THE MOST SPECIAL IT'S BEEN THE TESI500. WE'VE BEEN RACING IN THE ITALIAN CHAMPIONSHIP IN 1993. IT WAS A CONCENTRATE OF ALL THE IDEAS FITTED ON A MO-

TORCYCLE. UNFORTUNALLY THIS BIKE DOESN'T EXIST ANY MORE, A MECHANIC DESTROYED IT IN A ROAD ACCIDENT. AFTER THE TESI500 THE BIKES MOST IMPORTANT ARE THE TESI 1D, AND THEN THE 500V2 ROAD VERSION.

12/ What do you currently have in the garage at home?

A COUPLE OF TOYS......

TESI 1D, 500V2, T-MAX, BENELLI K2 100cc, APRILIA HABANA, HYDROSPACE (JET-SKI), AND FEW BICICLES.

13/ Most Italian motorcycle factory's have had a chequered history, often making stunningly designed motorcycles that have their own minor, and some not so minor problems, often with the results that owning an Italian motorcycle is seen as a love affair of the heart, it may not be the most level headed decision to buy one, that the bikes often require a more intimate level of ownership, but the rewards of owning one far outweigh the negatives. Why do you think Italian motorcycle's arouse such a passionate feeling it their owners?

BECAUSE ITALIAN BRANDS ARE VERY EASY TO IDENTIFY, YOU WILL ALWAYS RECOGNIZE A BENELLI, OR A DUCATI OR A BIMOTA, EVEN IF THEY HAVE DIFFERENT COLOURS AND STICKERS.

IT'S VERY IMPORTANT TO HAVE A BRAND IMAGE AND STYLE WICH SHOULD BE ABSOLUTELY PERSONAL.

JUST REMEMBER WHEN 888 AND 916 WERE RACING IN THE WORLD SBK, JUST WATCHING THE BIKES YOU COULD UNDERSTAND THAT IT WAS A DUCATI. TRY TO CHANGE COLOURS AND STICKERS ON THE JAPANESE BIKES, AND THEN TRY TO RECOGNIZE THE BRAND. IT HAPPENS THE SAME FOR THE STREET MODELS, AND THIS IS ONE THE REASON WHY ITALIANS ARE MAKING IT BETTER!

14/ On a technical side their have been some problems with the 2003-04 Tornado's here in Australia, we have researched 5 Tornado's that have all had different tensioner spring lengths, with the apparent problem that the spring bottoms out before it should and tension is lost on the cam chain, with the possibility that the chain can jump a

A selection of Marconi's work includes the Bimota DB2 (left), SB8RS (below), SB8K (middle) and the SB6R (bottom). Overleaf is the new version of the Ducati powered Tesi











cam gear tooth at high revs, what is the correct spring length for the 900 engine, and are the TnT ones meant to be the same, see here for more details http://www.mso.anu.edu.au/~ekowald/CamChain/CamChain.html

THIS IS EXACTLY ONE OF THE REASON WHY WE DECIDED TO ASSEMBLY THE ENGINES IN OUR FACILITIES. SINCE WE MADE THIS CHANGE ANYTHING HAPPEN ANYMORE.....
IT'S BAD TO SAY, BUT THIS IS THE TRUTH.

Feel free to visit Errol's web site as it has been a worldwide resource for us Benelli owners!

VERY IMPRESSIVE.

15/ Back in 04 we had the "Benelli Sport" official aftermarket products, are we to see this again as the "Benelli Officine" product range with more accessories made under licence for the Benelli factory?

YES, WE ARE WORKING ON IT, BUT AT THE MOMENT PEOPLE ARE GIVING MORE EFFORTS TO THE PRODUCTION.

16/ Does the factory have clothing available now for order by its customers worldwide and can we expect to see more of a family range of products for customers similar to what Ducati has with their clothing and Ducati branded items?

YES, NOT SO BIG AS DUCATI CATALOGUE, BUT BENELLI WILL OFFER A WIDE RANGE OF PRODUCTS. JUST LET US DO THE MOTORCYCLES FIRST, THE CUSTOMERS AND THEN THE ACCESSORIES.

17/ For our final question I'm going to leave it open for you to say whatever you wish Pier, go right ahead!

I WOULD LIKE TO SAY THAT THE CHANCE WE HAVE NOW IS VERY IMPORTANT FOR US. DOESN'T HAPPEN SO OFTEN TO HAVE THE POSSIBILTY TO COMPETE ON THE WORLD MARKET WITH AN ITALIAN PRODUCT, A JAPANESE QUALITY LEVEL AND A CHINESE COST.

WE HAVE THE LUCK TO HAVE SAME COSTS AS THE BIG FACTORY WITH A SMALL AMOUNT OF MOTORCYCLES PRODUCED.

PS, thanks for taking the time out to add to our inaugural edition of Benelli International.

PLEASE HAVE A LOOK ON OUR WEBSITE, YOU CAN DOWNLOAD THE SPARE PARTS AND ACCESSORIES CATALOGUES. AND THANK YOU FOR THE KIND WORK YOU ARE DOING FOR BENELLI. GOOD LUCK!



IL MERCATO (THE MARKET PLACE)

HERE'S THE PLACE FOR ALL THE BITS AND PIECES TO FIT TO YOUR THOROUGHBRED. WE WELCOME ENQUIRES FROM ANYONE THAT MAKES AND/OR SUPPLIES ACCESSORIES FOR THE BIKES AND HERE'S THE PLACE TO FIND THE PARTS OFFERED BY BENELLI'S OFFICIAL AFTER MARKET PARTS, WHICH ARE SOON TO BE MARKETED UNDER THE NAME "BENELLI OFFICINE. ENJOY!





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The photo's on the left are the rear sets now available from Italian aftermarket company Robby Moto. With height and fore / aft adjustable they certainly look the goods and look to provide more sole grip than the Tornado pegs with their rather slippery ball ends. Available for the TnT and Tornado they are made from billet alloy and allow for a race shift gear change. Contact your nearest Robby Moto distributor for prices and availability. I would suggest looking at their website, but it seems to have been under "reconstruction" for over a year now!

Another item that has just recently become available is a replacement air-filter from Greek manufacturer DNA. Offering a much larger filtered area than the stock, and rather restrictive factory item, the DNA filter is also fully washable and reusable. The DNA factory managed to produce a replacement filter after one of our fellow riders in Greece, a fellow by the name of Yanni, lent DNA his filter for 2 weeks. A fortnight later and, viola!, we now have a filter available for the Tornado, TnT and Tre-K. Well done to Yanni and DNA. Below is a photo of the stock filter, you can see the increased filter area with the DNA item.

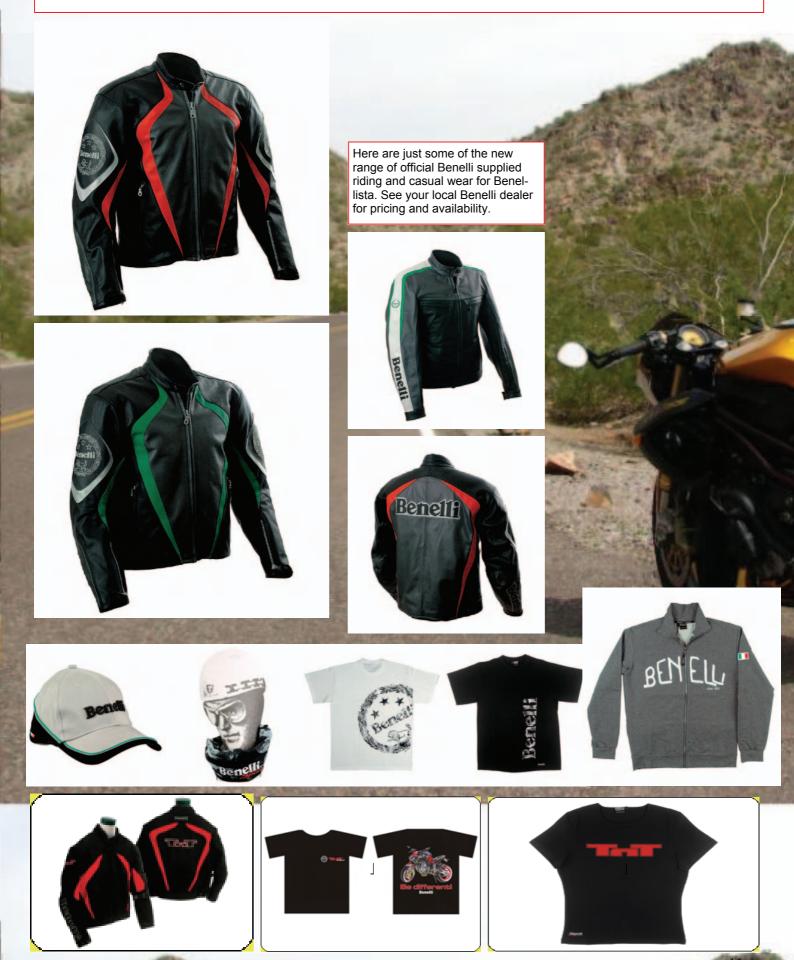






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Italian for Attitude

Rising Star 18yo Cole Odendaal signs with Benelli for the 2007 Naked Bike Championship

Media Release - For immediate release - 20 March 2007

Top young motorcycle roadracing ace, Cole Odendaal, has signed as the sole rider for Benelli and TJ's Performance Motorcycle Centre to contest the 2007 Australian Naked Bike Championship aboard a Benelli TnT 1130.

The Benelli TnT 1130 is an incredible piece of Italian motorcycling exotica instantly recognisable by its unique and aggressive design. It is powered by an 1130cc 4-stroke developing over 160hp and 'big triple' torque which gives the TnT real attitude.

"I am excited about this opportunity. The Benelli TnT is an awesome bike. Power delivery and handling is top notch. It is going to be great. I am looking forward to mixing with the champions, Scott Charlton and Jon Cartwright as well." Odendaal said.

"Cole is a young gun and aspiring Australian Champion. TJ's is all about developing motorcycling potential, so together we will develop a strong racing effort," said Terry Daly, owner of TJ's Performance Centre.

"The bike is very good already, as was shown at the opening round at Eastern Creek last month. Early testing and development, together with continued support from our sponsors, including Benelli, has been very encouraging and we are confident of a good showing this year," Daly said.

An established motorcycle performance development centre in South East Queensland, TJ's is responsible for bike preparation as well as development of the engine and chassis on the Benelli TnT. "Benelli's racing heritage, commencing with Tonino the "Terrible" in the late 1920's, is most impressive. Over the years distinctive bikes and design innovations have become a Benelli trademark. Our racing efforts are being observed all around the world. We are building on Benelli's special association with Australians Kel Carruthers, 1969 250cc World Champion; and Peter Goddard, 2001 & 2002 World Superbikes campaigns, to write a new chapter for Benelli downunder. The whole team brings together a wealth of knowledge and experience, and we are fired up." Daly said.

The 2007 Australian Naked Bike Championship is part of the support programme for the Australian Superbike Championship series, with the next round to be held at Winton Raceway, 22-25 March 2007.

Odendaal Goes Naked at Winton Raceway

Media Release For

immediate release - 28 March 2007

Cole Odendaal made an impressive debut on the Benelli TnT Sport for TJ's Performance Motorcycle Centre at Rounds 2/3 of the Australian Naked Bike Championship at Winton Raceway, Victoria this weekend. Odendaal, who turned 18 years of age earlier in the week, received a great birthday present by qualifying in third position on Friday with an encouraging lap time of 1m29.55. "Having not had a chance to ride the bike in anger before this weekend, we were always going to be up against it. I was really happy with my third place in Friday's qualifying and was hoping to be able to mix it with the front runners," Odendaal said. A cold inclement day on the first day of racing proved to be no real challenge for Odendaal and the TJ's Team finishing fourth and third in Races 1 and 2 respectively.

The conditions changed again for Sunday bringing warm weather and sunshine that equally matched Odendaal's attitude going into Day 2, and Round 3 of the championship series. He finished in fourth place in both races achieving his fastest time of the whole weekend of 1m28.52. "Unfortunately I really struggled with the clutch and got some bad starts this weekend. By the time I managed to get past the slower bikes, I had lost touch with the leaders. Julian Edwards, the Chief Mechanic for TJ's Race Team improved the setup during the weekend resulting in better performance and quicker lap times. I am pleased with the performance of the bike and can't wait to get to Mallala in 3 weeks time," Odendaal stated. "I would like to thank my sponsors, TJ's Performance Motorcycle Centre, Benelli for the awesome TnT Sport to race, Monza Imports, and all my supporters and fans for making this weekend possible," he concluded. "It was an exciting debut for Cole on the TJ's Performance Benelli TNT Sport which is in the early stages of development. The bike clearly demonstrated that it has plenty of torque, power, and ability to run easily at the top end of the field, and we are eagerly looking forward to the continued developments of both Cole and the TnT Sport as a premier racing machine," enthused Paul Nobbs, Australian Benelli importer.

The 2007 Australian Naked Bike Championship moves to Mallala Raceway, South Australia on 18 – 20 April 2007 for Round 4.













Benelli Tornado Tre 1130

The TnT 1130 has a great engine - imagine what it would be like in a supersport chassis... Benelli has snapped up the idea and let us test the new Tornado 1130



nter the 1,130cc Tornado Tre. The sound produced by the bang of three cylinders - that raucous, throaty boom - is so sexy that it's usually more than enough to justify this choice of configuration. You only need to start up the Tornado and warm the engine by blipping the throttle to understand that, even in its new guise, this engine is no exception to the rule.

The road test takes place on mixed terrain in Pesaro's surrounding hills. To begin with I focus on the engine characteristics, and straight away I notice that this lump responds more eagerly to small movements of the wrist compared to the 900cc motor. There is also still a distinctive family feel between this engine and the one that propels the muscular TnT. But the bias towards sportiness becomes increasingly apparent the more you open the throttle. As on the TnT, the new Tornado's power delivery is as forceful and broad as a Sumo wrestler. But it's in the mid to higher ranges that this one packs a real punch. Up until an indicated

4,000rpm the engine is calm and collected, and the fuel injection is much cleaner and more precise than on the old 900 engine. But as the speedo's needle surges up the rev counter, the pistons unleash an enthusiastic crescendo of energy that metamorphoses into explosive power between 7,000 and 10,000 rpm.

Having said that, the Tornado still excels in those tyre-shredding starts. Its planted front end banishes any over-eager tendency to hoist the wheel skyward - unless you want to, of course - instead leaving the bike to focus on devouring the road ahead.

Spot the difference

Compared to the old Tornado 900 the difference is massive, especial in terms of mid-range torque and high-end power. Sensations from your throttle hand speak of an engine that's only slightly less aggressive and exuberant than the Japanese litre bikes, but the





days when Benelli was at the cutting-edge of motorcycling. Back in the 1930s, this old Italian marque produced some of the most technologically advanced sports bikes around, boasting top class performance for the time. But in more recent times

things haven't been quite so fine and dandy for the manufacturer

from

of the likes of the Tornado 900 and the TnT in the early 21st Century failed to set the world alight, resulting in parent company Merloni ditching the cash-strapped Benelli for more lucrative ventures. Which was a blessing in disguise really, since Benelli was then snapped up by Chinese motoring giant Quianjiang, which has piled wedge into the ailing firm. Somewhat unsurprisingly then, Benelli Chorley bikes and parts are available once again.

Production is steaming ahead over at the Benelli factory too, with the R&D department rumoured to be working on a host of brand new models already. The first fruit of this brand resurrection is the soupedup Tornado Tre - the bike that symbolises Benelli's latest-but-one rebirth.

Remember the 900cc version? No one could

technological solutions - cast your minds back to that under-seat radiator with its extractor fans. The only nail in the tyre was an under-performing engine compared to the power monsters produced by Benelli's fiercely competitive Italian and Japanese rivals leven Triumph's Daytona 955i had a better motor). But it's nothing that 230cc of added testosterone wouldn't sort out

Mix one eager Italian chassis one torquey triple motor with one over-enthusiastic Italian journalist and hey-presto! A

ornado certainly has wide powerband to play with. My test route took n a tasty mix of twisties. uined only in part by bumpy patches, yet I barely had to work the gearbox to find he right drive out of corners. There's plenty of usable torque ight where it needs to be for the ider to tap into at will. The only ime I noticed a slight jerkiness in the throttle response was in the slower corners when I cracked the throttle from closed. This is probably the result of a slightly lean engine map in the low to mid ranges - I blame the tree huggers...

The problem vanishes as soon as the road opens up to become last and fluid and where the three cylinders are in their element and produce a smooth, instant throttle

response. The only glitch is a slight vibration from the engine that is apparent over quite a large slice of the rev range; enthusiasts of a triple's rough charms will love it. But it will bother the more exacting

I didn't need too many miles to note the old Benelli's chassis is just as excellent with the new motor slotted in. The Tornado appears eager to respect the Italian school of thought that prefers its bikes stable and planted round corners, and precise when it comes to finding and holding a line - albeit with a few inevitable sacrifices where riding comfort is concerned. Jump in the seat and it's immediately apparent that the rigid chassis has no intention of putting its rider at ease.

Classic Composure

The seat is hard and the centre of gravity is high. The suspension on the test bike was set-up for track use, but was easily adjusted to better suit the riding conditions. After softening the various adjusters it still feels rigid, but after a few miles I begin to

appreciate the solid feel from the 50mm Marzocchi forks at corner entry. The composure from the front-biased weight distribution inspires confidence when you haul the bike over, and urges you to brake later at every corner, and trail the brakes deep into the turn. Once settled mid-corner, the bike remains stable, and only during fast direction changes does the chassis feel more sluggish than expected. In this case the weight spoils the party somewhat, forcing you into a pretty physical ride. It feels much the same as the MV Agusta F4 or the Ducati 999.

Grip deteriorated in the last section of the road test, which brought to the fore another intoxicating thrill that is right up the Tornado's street - power slides. The truck-like torque of the engine means you may well find yourself depositing large black lines on the asphalt exiting slow corners. The fact that the skids remained on the road and not in my race suit served to underline the forgiving nature of the chassis and the quality of the o

NEW BIKES Benelli Tornado Tre 1130



powerband – it's always there at easy reach. As for brakes, we're talking mind-boggling performance. The Brembo radial brakes work with the bike's new slipper clutch to let you modulate stopping power at will. My best efforts at grabbing a handful and stamping down the gears only seemed to tickle the Tornado's composure. The stoppers are almost too good to be wasted on a road bike – their incredible feel and progression meant I never found myself in difficulties.

The Final Analysis

At first glance the new Tornado appears identical to its previous 900cc incarnation. The chassis lines haven't really changed that much. It's underneath the fairing where the good stuff lurks – a finely honed engine capable of staggering performance to rival its greatest competitors. The three-cylinder engine offers just the right compromise between the unlimited power of the inline four, and the usability of the twin – much loved by Italians. This begs the question could three be



The air you breathe at the Benelli factory today couldn't be more different to the dense black clouds that threatened its very survival only a few months ago. You'll find the same people working in the Pesaro establishment – the only real change is in the financial situation.

Corporate giants the Quianjiang group – which in its native China employs more than 14,000 people and produces two million engines and 1.2 million powered-two-wheelers a year – has decided to take its chances with Benelli and is investing staggering amounts of cash in the brand. This means the firm's revolution is profound and radical. Full production started up again immediately, and not

only that. Today every single engine is assembled inside the factory, which carries obvious advantages when it comes to responding to market forces and development.

The entire production line has also been revisited for new standards of quality control, and super-modern machinery is now used to stamp out the smallest of faults. It looks like the Benelli lion is ready to roar again.

the perfect number? With its 675 fancy thrashir
Daytona, Triumph has recently can say is wai
proved the three-cylinder route to find out wh
is a good direction to take if you succeeded in

fancy thrashing your rivals. All I can say is wait for our group test to find out whether Benelli has succeeded in doing this too.

Specifications

NU lns group: 17

Price: £9.999 OTR (tbc)

Displacement: 1,130cc

WHAT MAKES IT TICK?

BENELLI TORNADO TRE 1130



SUSPENSION

The Extreme Technology rear monoshock is fully adjustable – including separate high and low speed damping. The front end gets, fully adjustable 50mm Marzocchi forks, with coated stanchions to reduce friction. There is also an adjustable steering damper.

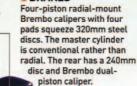
ENGINE

The 12-valve, three cylinders inline DOHC engine is closely related to the TnT's motor. It's produced by Franco Morini Motori in Bologna. The main difference is the new overhead cams with more lift, lighter pistons, different intake tracts and higher compression – 13:1 instead of 11.5:1.



FUELLING

The fuel injection has 53mm throttle bodies, with a single injector per cylinder. The ECU gets a Euro-3 compliant map that is __modified for the 1130's extra power.



BRAKES



Bore x Stroke: 88x62mm Compression: 13:1 Carburation: El 53mm throttle bodies Gearbox: 6 speed cassette, dry slipper

Type: 12v, Ic in-line triple, DOHC

Power: 163bhp@10,500rpm (claimed)
Torque: 91.5lb ft@8,000rpm (claimed)

Cycle Parts

Chassis: Steel tube trellis with aluminium components

Suspension: (F) 50mm USD Marzocchi, fully ajustable (R) Extreme Technology fully adjustable

Brakes: (F) 320mm twin discs, fourpiston, four-pad radial calipers (R) 240mm disc, dual piston caliper Wheels/Tyres: (F) 120/70-17 (120/65-17) (R)190/50-17 (180/55-17)

Rake/Trail: 23.5o/98mm Wheelbase: 1,419mm

Capacity: 20.5litre (4.5gals) Dry Weight: 198kg (436.5lbs)

Contact

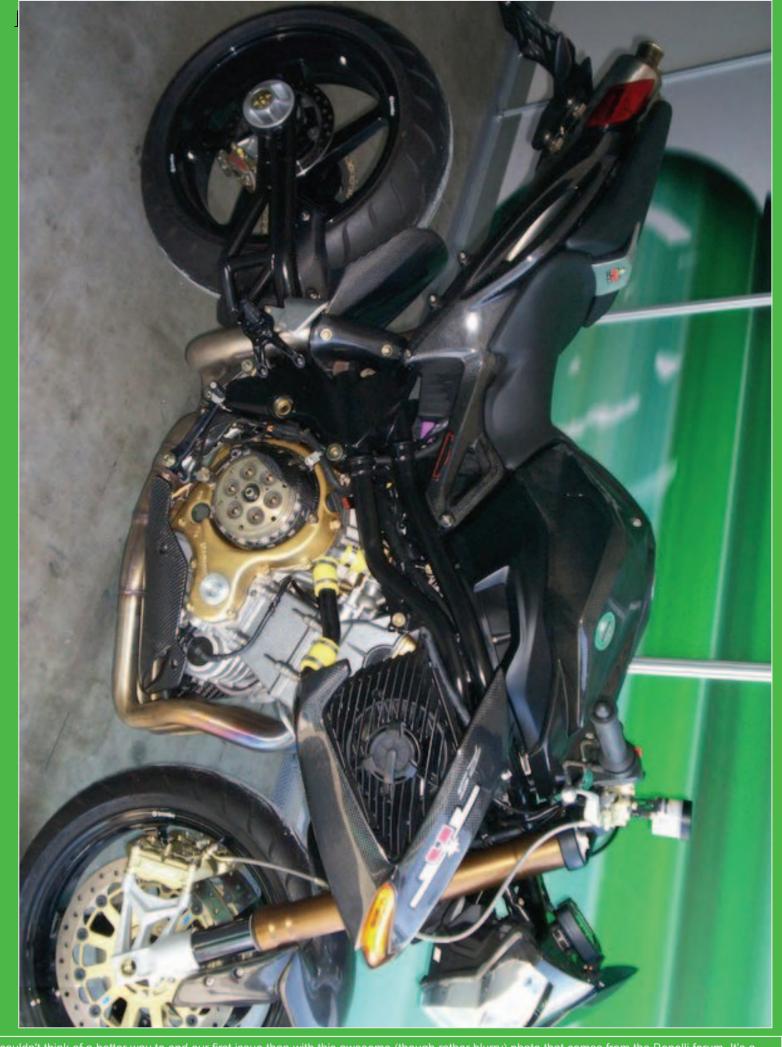
Benelli UK 0870 8506525



TRANSMISSION
Six-speed cassette gearbox with adjustable dry slipper clutch.

The frame is un-changed despite the larger engine. Only a 0.01mm adjustment to the aluminium swingarm. The tubular steel front section bolts to the cast aluminium alloy rear section.





I couldn't think of a better way to end our first issue than with this awesome (though rather blurry) photo that comes from the Benelli forum, It's a picture of the Factory TnT race bike, the TnT RS, this ,as far as we know, one off special runs a 165HP 1130cc Tornado engine with the Tornado RS suspension and brake package, a exposed dry clutch with engine cases taken from the upcoming TnT Titanium, Robby Moto rear sets that we believe will soon be available as a factory aftermarket item, OZ forged aluminium wheels and a carbon fibre rear sub frame and radiator covers, Tornado front brake reservoir and a full electronic racing dash. Now this is Dynamite!

Tornado 900 RS, The first 5000.

I remember the first time I ever saw the Tornado, it was in the October 1999 edition of Two Wheels magazine in an article by Kevin Ash. One of the early prototypes with the triple stacked boxed headlight and the traditional Benelli racing colours of green and silver, I thought one day I've got to have one of those. Back then I was riding around on a Husqvarna WR125 enduro bike, not the best thing for carving up the tarmac. Time moved on and my love affair for Italian bikes continued, unfortunately my income didn't match my interest in securing one. I eventually bought myself a VTR1000 and set about customising it, but the interest in the Tornado continued. Eventually in 2001 the bikes started to come to fruition, Benelli was racing in the WSK championship and their was talk of a production bike arriving sometime in 2002, arrive they did as the Limited Edition, a exclusive short production run way out of my league with the sticker price of sixty five big ones, but hope of a seriously cheaper base model kept my hopes up.

Fast forward to July 2004, The VTR was rebuilt after a errant car decided to rear end me and I had healed up pretty well, time to bite the bullet before home ownership restricted my purchasing power. I had read every magazine article I could lay my hands on, and started scoping out the bike shops around Australia. The first thing was the big asking price, of 30 big ones, mmm, start looking at the demo's. By this time I had found the home of all things modern Benelli on the world wide web, www.benelliforum.com and was aware of the bikes teething troubles and rumours of imminent closure later born out by the total closure of the factory. Oh crap, what to do? buy one and have no support? Being a member of the Bimota forum had prepared me for the pitfalls of getting a bike from a small time Italian manufacturer, and the ability to source parts from the factories component suppliers if indeed the Benelli factory was dead forever. Bugger it, you only live once, so I hit the web and trader magazines for a good deal, come early August I had narrowed it down to two, a couple of demo 03's for 25K, made up the list of warranty work that I had to have done to the bike (clutch upgrade, actuator arm etc) and prepared to make the call on Monday.

Monday arrives and I'm driving to work at 6am, grab petrol in the servo and decide to grab the trader mag as a last minute impulse, morning smoko comes and I'm flicking though the mag, when I come across a Benelli clearance sale!, whoa, Tornado's for 2/3rds the price, but what's this? a RS specification one for only a little more. Out comes the mobile and the call is made to Qld, "yep, what do you have left?, still a couple available, well I want one, any green silver jobbies, no, oh well, what's that, Oh hang on a minute, you're the bloke that bought all of Thoroughbred Motorcycles stock when they closed up shops years ago, with all the Laverda, Bimota and Ducati gear, you remember me, I rang up about the Bimota SB6 fairing moulds but the Bimota sold the morning I rang up a shop to buy it, Yeah, still wouldn't mind owning one. Yeah, chasing a Tornado but I really wanted a green silver job, Hows that, you will sell me a RS for the same price and throw in the freight cost's and drop the price another couple of grand if I buy it now as another blokes umming and arhing about the RS or Base Tre, yeah done!"

So August 05 my dream bike I waited for since October 1999, is in a box in front of me at the workplace store, waiting for the tin snips to cut the strapping and to be unveiled, hallelujah!



After gingerly removing the box and tie downs the bike is on its side stand and ready to go, I knew the battery was disconnected and maybe in need of a charge, so I connect up the charger and wander back into the office for a few hours. Okay time to start her up, She takes a few goes and viola!, she's awake. After sitting in her transport box for over a year the RS rumbles into life, with the clutch sounding all the while like a tin can full of nuts and bolts and a rough idle I force myself to resist a quick spin and put her through a couple of warm up to totally cold engine cycles to help bed everything in and to get good ring sealing in the bores. The next few weeks offer up a veritable symphony of noises, from the gravel clutch sounds to the most gorgeous induction roar I've ever heard! The bike is intoxicating. Oh, the mirrors are pretty, useless that is, but the suspension and brakes are just so damm good!. All thoughts of "have I done the right thing" fall's by the wayside once you hit the road.



5,000 kilometres in and she's just about ready for her first proper service, some people have gone to 10,000 and the valves are still A1, where' as others find theirs are a bit tight by 5,000. I've decided to have a look and she how's she's progressing, I most likely will fit the TnT revised starter gears to she if that helps her starting and avoids the syndrome of to many failed starts draining the battery. Things that have happened include; the backing peeling off the windscreen, a common fault with all the 900 RS's and a warranty item, I upgraded the battery loom with thicker / additional cabling, with using the kill switch to stop the motor and leaving it off I find it pretty much cures the draining battery condition. Fitment of the factory supplied "Benelli Sport" titanium pipe, much nicer looking than the brown thing that it comes with and about 80% lighter! I loaded in the race map #6105, with a slightly higher idle to have better idling when cold. Things I want to do to her are to get the throttle butterflies synchronized and the stepper motor adjusted via the Tuneboy ECU software and the trim maps fettled and so forth, I find the biggest hurdle being the lack of people with Tuneboy experience here in West Australia, I could go with a power commander, but the Tuneboy will interface with Dynojet's tuning link software and the Tuneboy is more versatile. So maybe I'll just buy my own dyno and be done with it!. The things that I most admire about the bike is the fine attention to detail Adrian Morton put into designing her and the novel engineering that see's the highly efficient cooling system working very well, even in Perth's 40 degree summer days. Most of all though it's the spine tingling induction roar the thing makes under acceleration, its truly sensational!

The RS is one of only eight that made it to Australia, and with production of the 900cc Tornado stopped to make way for the new 1130cc Tornado it's a pretty rare beast, of the eight that did come in, one became a race bike and the other a press bike, so she will always be a rare sight on the roads. Whether I ride her, twirl the spanner or just unwind in the shed with a beer and some tunes and a few bike magazines, I still sit back and think, well, I finally chased that dream down, after all, I waited 6 years for it! :-)





Bitten by the BUG?

BUG BANDIT TO BENELLI - IN 15 MONTHS

Two years ago, at the age of sixty I had never ridden a motorcycle in my life - I had always been interested in sports cars ever since getting my licence at 17. That was all to change one night, thanks to the efforts of an unknown recalcitrant. He, she or they tried unsuccessfully to break into my car by jemmying both door locks whilst it was outside our office in Fremantle's West End.

After a spate of other break ins involving my colleagues cars, I decided it was safer to buy a motor scooter & lock it up in the office whilst I was piloting. Very quickly I realized what good fun my 50cc Bug Bandit was, but the lack of power & susceptibility to strong cross winds left me wanting for more.

After 15 hours of instruction on a CB250, I passed my WA 'restricted' licence (RE) and went hunting for a 250cc bike. All the pundits said I should consider the usual suspects: VTR 250, GPX 250, ZZR 250 & Virago. After riding all of them I was not totally convinced – a couple of minutes on a Honda CBR250RR 'Babyblade' sold me.

During the obligatory 12 months on a 250, I had seen on several occasions the most exquisite looking bike at a dealer who had several Italian marquees. The silver & green Benelli Tornado TRE stood out and I was in awe. Much to my surprise it was still unsold when I passed my unrestricted licence. I test rode 18 bikes in 5 days, short listed down to 5 & re rode them. The choice was between the Tornado, TNT, MV Brutale, Suzuki SV1000S & MV F4. My heart ruled my head & I ended up with Benelli Tornado.

If I had known about all the 'problems' then I probably would have gone for something else. Fortunately for me, I now have 8000 kilometres trouble free riding under my belt. Apart from the clutch basket not being replaced & the correct ECU fuel mapping not being applied prior to delivery, the only other items have been the replacement of the gear change lever and a cracked tail light assembly.

The Author wins best post 2000 peoples choice at the Ducati Owners Club of Western Australia Moto Italian show day on the south Perth foreshore in November 2006



Likes

- Design I just love the design & the green/silver colour scheme. Like other Benelli owners I sometimes just go up to the garage and sneak a look at it.
- Exhaust & Induction noise – the triple both under acceleration & downshifting is exhilarating
- Cooling System apart from the stunning design concept it actually works very well & is a much 'cooler' bike than an R1 or MV F4 when the temperature is in the 40's Riding Position – Of all the sports bikes I rode, with exception of the Suzuki GSX-R 1000, the Benelli was the most comfortable

Dislikes

- Turning Circle is terrible & you certainly have to think about where you are going to park it before committing yourself
- Seat Height it is a tall bike for average height riders like me.
- No frame sliders without cutting into fairings
 Weight I think it is a relatively heavy bike & in combination with the seat height is an easy bike to drop (for me that is!). It is also virtually impossible to pick it up by oneself. I have dropped the bike twice once in the garage when I slipped and managed to let it fall on me without damage to it or me.

- once at a blind corner T junction at the end of our street, when a Range Rover raced around it well above the legal speed limit & my foot slipped on gravel & I dropped it doing cosmetic damage to the right mirror, lower, upper fairing & exhaust pipe. Fortunately the dealer gave me a spare right mirror, upper fairing & exhaust from when it was twice dropped once on a demo run & once by a salesman. Motto is be extra careful as I do not claim to be particularly clumsy or accident prone!
- Finding Neutral even after the actuator kit etc. cannot find neutral unless downshifting prior to stopping Instruments reset on starting– not a big deal really, just a minor irritant.

The 'likes' far outweigh the 'dislikes' & I have no reservations about buying the bike. I'm hoping with the massive financial commitment by the new Chinese owners, my desire to change over to a TNT derivative within the next 18 months will be capable of being fulfilled. Meanwhile I will extract as much pleasure from the Tornado as I possibly can. Safe & enjoyable riding

Vince Nolan





WHY I BROUGHT THE BENELLI

By Steven Pasqualin

My brother showed me the TNT a few years ago and I didn't like it much, the big head light the exhaust pipes turning me off. But then in 2006 I sold my Holden SS. Ute and decided to buy a road bike. I already owned a GAS GAS 450 and had so much fun in the bush on it. I thought why not a road bike?

I went and road tested an Aprillia RSV MILLE and liked it but I wanted a naked and the Aprillia TUONO was not in the shop. Meanwhile my brother showed me the TNT again and I started to like it .so I rang up the importer and asked for some brochures, when the brochures arrived I fell in love just with the photos of it, I then organised a test ride of a one of them from Benelli dealer Jetsport in Wollongong. When I got to Jetsport and saw it for the first time in the raw it was even more sexier, the lines, the pipe at the rear with the two black lights on each side, the frame, the whole look just was amazing.

So off on my test ride and I noticed how great the handling was straight away! around a big roundabout and off onto the freeway. The acceleration was amazing and I already had a big grin on my face, I turned of to go to the Mt Kira lookout and down the other side, all windy roads, stuff the lookout, ,I was having so much fun. Once down the other side of the mountain I couldn't resist and had to go back up and down again, then back to the bike shop with a huge smile on my dial. Knowing how great the handling, acceleration, brakes were, all I could think was wow!

My brother took it for a blatt as well and when he finally came back, he got of the bike and said to me. "If you don't buy this bike I'll kill you, with a huge grin on his face as well. WHAT A RIDE, WHAT A BIKE!

this bike I'll kill you, with a huge grin on his face as well. WHAT A RIDE, WHAT A BIKE!

It took us three hours to get back home and by then I knew that this bike was the one I wanted.

So I ordered the TNT sport and have had it for about 8 months now and have clocked up 10500 km, and still I get a great big

grin on my dial every time I ride her. THANKS BENELLI, FOR THE FUN!





The New Tre-K has garnered a lot of interest from the "tour to you drop" crew, which usually are older gently men who think BMW's are hot and red wine is the only thing worth drinking and join clubs named after a Greek god, personally I cant wait to wait to get old enough to join them!, apart from the BMW factor that is.. Here's a copy of a review taken from the forum, www.benelliforum.com. the home of all things Benelli, thanks to Roland Lee for the use of someone else's article, namely motorcycle.com who gave us permission to reprint the article in full and who borrowed it from the UK's Motorcycle news!



It's not the fastest or the sexiest, but the new Tre-K is without doubt the best Benelli yet. The Tre-K is Benelli's take on the do-anything, go-anywhere road bike. With its comfy riding position, punchy triple-cylinder motor and fine handling chassis, the Tre-K is as at home trundling along the motorway down to the south of France as it is scratching don the mountain when you get there. But, Benelli's finest, surely not?

Since the rebirth of Benelli in 2002, the Italian bike makers have been best known for their performance bikes: the clinically insane TnT super naked and the Tornado, which they campaigned in World Superbike. So, with such focused, single-minded machines in their stable, why is this jack-of-all-trades all-rounder the best Benelli yet?

Well, up until now Benelli has struggled. The first 900cc Tornado never ran properly when it was first released, and then it lacked the power to keep up with its rivals when they finally sorted it. The TnT had all sorts of quality control issues making this a flawed motorcycle too. But now, flushed with cash from its new Chinese owners and with new management in place, they've finally produced a bike that does exactly what it's been designed to do. It doesn't just do everything well, it does it brilliantly.

The great thing about the Tre-K is just so how easy it is to get on with. Sometimes Italian machines are described as 'quirky' or 'full of character' when you have to make allowances for them not working properly, but the Tre-K is thankfully the opposite as feels like a well-sorted Japanese machine.

The riding position is exceedingly natural. High, wide bars are placed just where you want them to be, the sculptured seat is comfy and the low-set footpegs give your legs the sort of stretched-out treat that budget airline customers would kill for. The capacious 21-litre (5.5 gal) fuel tank tapers in at the bottom so knees are only a few inches apart when riding, giving you a good feeling of control. A three-way manually adjustable screen helps direct away the windblast on motorway cruises. Optional luggage and a sat-nav system will also be available.

Although the 50mm upside Marzocchi forks and Extreme Technology rear shock (all fully adjustable) scream 'racetrack' they are of course set supple enough for everyday riding but still retain good enough damping control to prevent the Tre-K from pogo-ing like

Zebedee (a character in the BBC children's program The Magic Roundabout) with a drinking problem. Twin four-piston Brembo callipers offer up loads of feel and decent stopping power for the bike's claimed dry weight of 452 lbs. Around town, a generous steering lock makes three-point turns easy.

How easy the Tre-K is to ride was highlighted beautifully when we rode it on the same stretch of road as a tuned, stiffly-suspended TnT 'special' a few hours before. The soft, predictable user-friendly nature of the Tre-K and big wide bars made it easier to deal with the constant, bump-strewn switchbacks on the coast road between Riccione and Pesaro, just down the road from Benelli's factory. If you were able to race yourself on both of these bikes, the Tre-



Just the bike for crossing a continent?, a TnT crossed the Sahara!



K, ironically, would win hands down.

Like the Multistrada, BMW R1200GS and Buell Ulysses, the Tre-K comes with dual-purpose tires, in this case Dunlop D270s. Although they do give good grip and warm up quickly, they can be provoked to let go early. It's doubtful you're going to take the Benelli off-road (the exhaust running beneath the motor and tire-hugging front mudguard would prevent any serious mud-plugging anyway) so you're best off just fitting some road sports tires.

Okay, so the Tre-K is plush, roomy, and comfortable, and on a tight, twisty, bumpy road is easier to chuck about than a sportsbike. But you could easy say this about any of Benelli's rivals on their day. What makes the Tre-K really stand out is its rasping three-cylinder engine; it turns what could be perceived as a pretty normal motorcycle on paper into a full-on 3-D, cinema surround sound, Technicolor experience.

When you need to be pottering around town or threading through traffic, the Tre-K's motor purrs along and is nice and docile. Throttle response is smooth and there's plenty of grunt at low revs to render the gearbox obsolete if you just fancy sticking it in sixth all day and cruise along.

When you want to get a move on, though, the motor rewards not just with a guttural growl through its airbox and a howl through the underseat exhaust when you twist the throttle, it lets the Tre-K get a serious shift on, too. The engine's character is similar to that of the new 1100 Multistrada in terms of how it makes its low- and mid-range power, with torque peaking at 6,250 rpm with 85 lb-ft of claimed twist. But where the mute-sounding Ducati disappointingly stops way short of delivering any top-end shove to speak of, the Tre-K carries on and revs harder, stronger and louder. And the result, an alleged 123 horsepower at 9,000 rpm, is 10 times more exciting.

Power delivery is not brutal, though, and that's one of the pleasures of riding a bike like this - you don't want to have your arms pulled off under acceleration at every opportunity. The Tre-K is fast 'n' swift not vicious 'n' scary like a super naked. What you get is a smooth, progressive spread of power and a typical soul-stirring Italian soundtrack from tickover all the way to the 9,500-rpm redline that doesn't leave you wanting more. Gearing in the higher ratios are tall, so the engine purrs on the motorway.

What you get with the Benelli is a practical, user-friendly motorcycle brought to life by a huge injection of Italian charm, speed and handling.

The £8349 Tre-K is the natural rival to Ducati's new £7750 Multistrada 1100, the new £7049 Triumph Tiger, the £9095 BMW R1200GS and the £8195 Buell Ulysses. That's not cheap, but you do get a lot of machine for your money, not to mention the added exclusivity factor.

Not only is the Tre-K funkily styled, quality components are present throughout, from its Brembo wheels and brake calipers to the Marzocchi fork and Extreme Technology rear shock, braided-steel brake hoses, beautifully sculptured bodywork and tubular steel chassis.

Now, it's fair to say that for some owners living with a Benelli over the last few years could've been fraught with disappointment. Some Benellis have been unreliable, and getting hold of spares difficult. It's little wonder, really, since the factory has been going through financial problems resulting in its closure for a whole eight months last year.

But all the signs are that things have now changed for the better. With the new Chinese money and a new management structure, the Italian firm seems to be back on track. They are addressing the spares situation, are working hard to consolidate a UK dealer network, and most importantly making their bikes more reliable by sourcing better quality electric and mechanical components. They're now assembling engines in house to keep an eye on quality rather than buy them wholesale from an outside supplier.

Benelli's so confident of the Tre-K's dependability that one of their South American dealers is doing a 9,000-mile trek across Brazil next month to showcase its reliability. The thought of breaking down in one of Rio's dangerous Favela areas doesn't bear thinking about so he'd better hope the old girl keeps on running.

Verdict

It's ironic that the Tre-K is the best bike to roll out of Benelli's factory gates. I'm sure they had rather it been one of their performance bikes, since Benelli and racing are inextricably linked, but I guess it's a question of timing. Benelli finally seems to have sorted themselves out. This is the first new bike to come from the resurgent company and it's very good.

The wonderful-sounding Tre-K can be practical and workman-like when you need it to be, but will also let its hair down and boogie when you're in the mood too. It's nicely put together, looks the part and is a deal more









Welcome all the one of the most interesting and helpful parts of the magazine, the Tension Sessions, the following pages contain articles of a technical nature to get the most out of your Benelli and solve any issues you may encounter. The following information comes from a variety of sources, but mainly from our man in Canberra, Errol Kewold. With help from our friends on the forum, www.benelliforum and input from its members we have discovered many tricks and tips, especially when the factory has closed up shop in 2005 for a number of months. So enjoy and if you discover any more helpful tips please post them on the forum or contact the editor.

Tre Battery Cable (22 Sep 2006)

The 03 & 04Tornado's suffer from too much voltage drop on the battery cables during cranking. This results in sluggish cranking speed and contributes to the resetting clocks problem. The existing cables are each 1m long and use 8mm² wire. The total resistance is 0.005 ohms, which causes a 0.625V drop if the battery can deliver 125A. Not hopeless, but half that is better. Due to the restricted space under the battery, an additional 8mm² cable set was added, rather than replacing the existing cables with 16mm². There is space to add another set if desired, for a total of 24mm², but that is probably over-kill. The terminal bolts need to be longer, to accommodate the extra lug. M6 x 15mm worked for me, but depends on the lug thickness. The positive cable is 1000 mm long. The negative cable is 800 mm long.

From the top picture at right is; The finished product.

Cable routing under the battery.

Positive connection to the solenoid (pardon the focus - the camera lied)

Negative connection, 200 mm shorter, bolted to the rear of the engine.

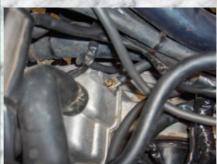
The result is crisper, faster cranking.

The TNT especially will benefit from fitting larger cables, as stated by "vxtbrit" on the Benelliforum, 21 Sep 2006. Refer to his post under "Upgraded Battery/ Starter Cables" in the General Discussion thread. The upgrade shown above, however, refers only to the Tornado.









Resetting Clock & Trip Meter (5th February 2007)

It's a cold morning and you've decided to take your 'nelli for a blast though the hills. You turn her on, the dash goes through it's familiar dance, then you hit the starter. She turns over a couple of times, then stops briefly, before continuing, then firing up. You notice that the dash is repeating its 'dance'. Then you realise that the clock has reset to 12:00, the trip meter is back at 00.0 and, if you had the lap timer running (unlikely), it is back to 00:00:00.

Sound familiar? Well this is what I'm attempting to fix. If you still have one of the original dash's (revision A in particular), you would find that it resets just about every time you start the bike. This happens because the battery is too small for the job, and when cranking the engine, the voltage drops below that needed to keep the dash electronics alive.

When I first picked up my Tre, I was baffled how she knew that I had just refuelled her. Then I realised that the clock was resetting as well the penny dropped. When I got home I called the local guru, JohnnyO, and he sent me a new dash. He let me keep the original so that I could attempt to fix it. He had a box full of them. So that's how I started on this project - the Tornado Tre Dash UPS. Now, at version 3, the solution is at hand.

Some Solutions Tried in the Past

The new dash - revision D - is much better than the original, but is still susceptible. It resets on me every month or so. Some guys put their nelli's on a charger overnight to get around the problem. AussieRS is trying a starter gear ratio reduction. Someone has squeezed in a bigger battery.

Others don't care. I tour on the thing, so the clock & trip meter are important to me.

I understand that Aprilia's have the same problem.

Dash Revisions

One other thing, the revision A dash operates differently to revision D. When you hold the mode key down on the 'A', the mode changes before your eyes after several seconds. The 'D' changes once you release the key. If you didn't hold it down for long enough, nothing happens. Personally, I like the 'A' method better, so that's the one I'll be using once the UPS is up and running. Finally, the odometer reading is stored in non-volatile memory (electrically erasable flash), so it will not reset. You can reset it, if you try really hard, but that involves direct communication with the serial EEPROM. You need to dismantle the dash to get at it.

Tornado UPS - Test Results

(12 Feb 2006)

Test Setup

The UPS was connected to a 13V bench supply. The Main switch set to ON. The dash (version A) was set to display the lap timer, and started, somewhat synchronised with a counter. A meter indicated the backup battery voltage. Note that the fuel light is on, the fuel level is nil, the ambient temperature is -30C, and the engine temperature is maxed out. None of these sensors are connected. Note also that the red LED, in the top right of the circuit board is not illuminated, indicating that the backup battery is fully charged.

Purpose

The purpose of the following test was to find out if the UPS could keep the dash from resetting, without a main supply, for at least 10 minutes.

Indicator



00:55 Supply voltage ON. Reading backup battery voltage



01:37 Supply voltage OFF.



30:37 Supply voltage OFF.



90:56 Supply voltage OFF.



91:26 Supply voltage ON.

At 91 minutes, the experiment was stopped, because it was clear that the backup battery was still holding charge sufficient to keep the dash from resetting. When the supply was returned, the lap timer was still synchronised with the counter.

Note that the LED, in the top right of the circuit is now illuminated, indicating that the backup battery is being re-charged.

Conclusion

The test was a complete success. The Tornado UPS, in its current state, is quite capable of keeping the dash from resetting during a blackout.

Further development

- 1. Reduce the battery size. There is no need to keep the dash alive for any more than 10 minutes. The current circuit will keep it alive for more than 90 minutes. The current battery is 80mAh, which could be reduced to the minimum commonly available, namely 15mAh. This would save some area on the pcb.
 - 2. Implore Benelli to release some plugs and jacks, so that the gentle Tornado owner can easily retrofit the UPS.

Addendum

Curiously, when the mode switch was activated (at 93 minutes), in an attempt to begin another lap, the new lap time did not start from 00:00:00, but from 93:00:00. It appears that the version A dash has a lap timer bug, which could only be cleared by changing the dash mode to "time of day". Of course, there aren't a lot of circuits which take 90 minutes to complete a lap, so it's probably not a bug that will be seen often.

Resetting Clock & Trip Meter - UPS Development</FONT< P>

Tornado UPS: The third attempt at fixing the Tornado's resetting clocks. (23 January 2006)

The red & black wires at the top come from the battery, The switch in the foreground mimics the Main Switch. The connection to the dash is not shown. The circuit works by monitoring the battery voltage, and switching the dash to a low power state when the voltage drops below 7V. At this point, the backup NiMh cells supply the dash with power. When the main battery voltage rises above the backup battery voltage, it resumes supply. When the voltage is above 8V, the dash is automatically switched back on.

This circuit will allow the removal of the main battery for several minutes, without the clock, trip meter or lap timer resetting.

It is still under development, but well advanced, as you can see.

12 Feb 2006: Tornado UPS Test Results

It's now a matter of packaging the UPS, and final testing, but the Tornado's "resetting clocks" problem is nearing a conclusion.

26 Mch 2006 Update

Today the dash ran successfully on the smallest (15mAh) batteries available. Also managed to remove the large storage cap - dark blue part in the picture above.

Currently working out the dimensions of an internal board. It'll be a squeeze, but I reckon it will fit. Should know in a week or 2.

19 Apr 2006 Update

Given that John Orchard is looking into changing the starter motor gearing on the Tre (and the TNT), I'm going to hold off on spending any more money on this project until he can confirm that his mod. solves the problem - or not. I suspect that it will. The starter motor should not draw as much current because it is not providing as much torque. In turn, the battery itself will not need to provide as much current, and so, shouldn't be limited by it's internal resistance. As much as I've enjoyed solving the problem from an electronic angle, the mechanical solution is simpler and cheaper. The only question is whether it will turn the engine fast enough.

19 June 2006 Update

No word from John Orchard about the starter motor gearing on the Tre, and mine reset on me again recently, so I've gone ahead and laid out a circuit board for the (hopefully) final incarnation UPS. It'll take a couple of weeks to get the board made, then populate and test.

I aim to pot the whole module so that it can sit between the screen & the dash. It will measure approximately $18 \times 24 \times 60$ mm. The ground line can be tapped from the existing loom, but the Battery (pin 19 on the Dash plug) & Main Switch (pin 20) lines must be broken and the UPS connected in-line. If I can find a crimp pin equivalent to that used in the 20 pin plug (A20FW), I may be able to come up with a procedure that doesn't require cutting wires. Here's hoping that Benelli haven't re-invented the wheel.

03 Feb 2007 Update

Finally, I've installed the prototype Un-interruptible Power Supply onto my Tre. It's been waiting on the bench for months, but I haven't had time to get it operating.

So far, it's working fine with the original, very susceptible dash.

The prototype is housed in a plastic case so that I can open it up and make changes as needed. The final product will be potted, and slightly smaller still.

Both pictures show the circuit charging it's internal batteries. You can see a red LED illuminated. In it's current incarnation, there are 3 wires that need to be spliced from the loom. You can see the additional 3 pin connectors - white with blue end seals.

I may be able to fit it into the dash itself, but it will be a tight squeeze, and a very unusually shaped board. If there's sufficient interest, I'll pursue it, but what you see was the easiest way to get something working.

The circuit is essentially the same as that developed a year ago. It's just been miniaturised. If necessary, it could be reduced by, perhaps, another 50%, but I'd need some convincing!

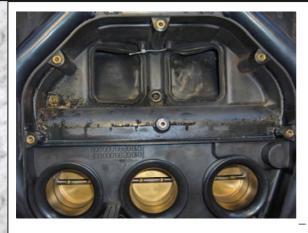
If you have an interest in this little gem, contact Engenia. On the Benelli forum



Moving the Induction Air Temperature Sensor (4 May 2006)

The temperature sensor in the airbox cover gets covered in crap. Oil from the filter drains into that corner, and traps all manner of rubbish - bees, seeds & grass, to name a few. The sensor couldn't possibly read accurately, or quickly, when covered with so much garbage, so I bit the bullet and shifted it. It is now mounted on the front wall, above the left hand air inlet, with the small plastic protector vertical. Only been up Mt Stromlo once since, but the new position doesn't appear to have upset her at all. Hasn't stalled either, but she has only done that to me a handful of times in 16000k, so I can't say if this has made any difference (yet).

Update 4 May 2006: She stalled on me last night as I was pulling into my driveway. So moving the sensor didn't solve that problem from 2nd gear, power off, clutch in, select neutral eerie silence.





The Airbox after 4,500kms. On the right is a close up of what the sensor must deal with.





The new sensor position inside, and outside, on the right.

Tip-Over Switch

The picture on the right also shows the sponge mounted tip-over switch, just behind the temperature sensor. The cable tie holding it in position can be clearly seen in the left picture. Without it mounted this way, vibrations around 10,000rpm may fool the ECU into thinking that the bike has fallen over. The bike I demo'd did this to me. I was amused to hear Gecko's explanation - they are no longer Benelli dealers, thank God.

My Tre arrived with the tip-over switch bypassed! You really do need this little piece of safety gear, so check that it is in-circuit. Your engine will love you for it when it is lying on it's side one day, spooling down to zero. The alternative is - it's sitting on the rev-limiter, with no oil at the oil pump pickup. Your choice.



How to Make the Arduous Task of Removing The Tank a LOT Easier (30 July 2006)

I got sick and tired of struggling with the fuel line every time I wanted to remove the tank. Generally it was a 2 man operation. It got harder when the tank tabs broke off, and the Benelli tool (#R180100143000) would no longer work. I had to sacrifice a pair of long nose pliers to make a tool that would expand the retaining clips in the "rapid unhooking petrol tube" (Benelli's words - see pg 120 in the Tre Manual), but these were just as difficult to use as the original one.

The new method for removing the tank involves lifting it up and forward (protect the top triple clamp with a thick clean rag), sitting it on the frame, disconnecting the hoses and wiring, and removing it. Next to no fuel spillage, and a one man operation taking about 2 minutes. Not much different to before, but the cursing and swearing part has been removed from the procedure, along with some time. The magic part is the addition of a Quick Release fuel line connector. It is sold by Touratech in <u>Germany</u>, <u>USA</u> & now <u>Australia</u>. The one I used is 8mm & seals the tank hose when it disconnects. The delivery side is open, which means some fuel will escape onto the garage floor, but within acceptable limits.

The part number is 01-100-0106-0. It cost me AUD64.90, including shipping and taxes - it would have been cheaper to get it direct from Germany, but they insisted on dealing through their Australian distributor. It's pictured below.

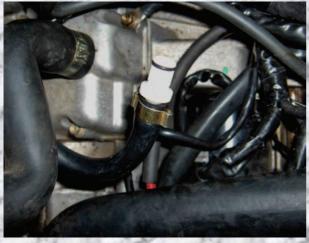


Fuel Line Quick Connect Parts



Original Hose Cross Section

The hose itself is very stiff. The internal diameter is 6 mm, so it must be expanded before fitting the barb. I forced an 8mm ball ended Allen (hex) key, into the core to expand it. The length of the expanded section must be enough to allow the barb to slide in full length. If not, the barb is not strong enough to complete the job. It will remain too short. A better tool would be a 9mm ball fitted to the end of a 7mm rod. This would allow the expanded depth to be reached more easily. As I only had 2 to do, I didn't bother making the tool. The fuel line is shaped like an 'S' - I placed the connector at the inflection point. Make sure you slide on



Delivery hose attached



Finished Tank Hose

I also heated the tank hose (right picture) in boiling water, and made the curve tighter.

Nick [nique from the Benelliforum] has also done this mod. He sourced the same (Motrax) fuel coupling from <u>Sound Distribution in the UK</u>

Aussie Frame Numbers (12 (July 2006)

The following is a list of the Australian Frame Numbers that were yet to have their dodgy clutch baskets replaced, as of July 2006

- 300	
Frame	Engine Number
16	???? (NZ)
17	2009
27	2014
28	2022
33	2014
58	2056
59	2069
61	2081
161	2216
213	2251
214	2243
215	2247
220	2248
297	????
397	245
402	2455
403	2451
496	2565
497	2562

If you are riding one of these bikes, do yourself a favour and get the basket replaced. It has a weak middle gear - the one that drives the alternator - which is known to fly apart and do a lot of damage. I believe that it is too narrow for the job being asked of it. For you owners outside of Oz, if your frame number is less than 497, you should also be worried.

Just what temperature should the Tre run at? (16 July 2006)

From marcho (29Jun06 5:38 am)

Can anyone tell me if the temperature gauge on the Tornado is even vaguely accurate? In the current warm weather (UK 28 deg C) mine runs at around 95 Deg travelling at 50mph or more but if I get any traffic for a few minutes it's straight up into the end of the red or even off the gauge! Reply from aussievtr (29 Jun06 5:46 am)

Do you mean engine water temp or the ambient one, sounds like you just need to do the coolant bleed, I'm in West OZ and have never had a problem in 40 C weather.

Reply from Johnny O (29Jun06 5:36 pm)

Tornado's are supposed to run at 95, bottom of the red zone on the temp gauge.

Make sure you have the correct radiator cap and that the system is bled properly and that there is no coolant in the expansion tank when cold.

With that done, you will not have any problems.

How To Bleed The Coolant System

(23 July 2006)

- Remove the radiator cap
- Top up the radiator
- Leave the cap off (counter intuitive, I know.)
- Lean the bike as far as you can to the left (just before the fairing touches the ground)
- Stand it up
- Top up the radiator
- Lean the bike as far as you can to the right Stand it up
- Top it up again
- Replace the radiator cap<

NB: As you lean the bike over, you will hear the trapped air rising to the top.

The radiator cap pressure is 1.4 (units?), and the seal is 25mm (not the original 22mm, which leaked)

While we're on the subject - Topping Up

The manual will tell you to keep the overflow reservoir between the min. & max. marks - don't bother. It'll only be there when it's hot - if it feels like it. If you are just under max when cold, when the engine



This is a view of the end of the overflow pipe on my Tre. Just behind #3

Check the fluid level the easy way - only when cold, and then by removing the radiator cap. You may see the fluid just below the cap seal. If not, add a little. It's probably lurking in the transfer tube, and will only take a thimble full.

How to Fix a Dragging Clutch

(14 June 2006)

This problem was posted to the Benelliforum by "irfuel". Taksil apparently has also suffered it ...

irfuel --- I have some issues with my clutch, it doesn't seem to "decouple" completely. So when pressing the clutch lever all the way in, it still stays a bit connected and I feel the bike pulling forward. Also the clutch lever only seems to work at the very last part of its usage, so with my fingers nearly completely stretched.

With the engine off, the bike in 1st gear and the clutch lever completely pulled in, I cannot push the bike forward There's 2 things to look for :-

1. JohnnyO ---

Do you have the improved clutch actuating arm (steel instead of alloy) fitted on the left side of the engine?

The improved actuating arm reduces clutch drag (which is what sounds like you are suffering from) and makes neutral easier to find.

2. JohnnyO's Clutch Adjustment procedure --- submitted by Taksil - refer to photos on pp 151, 162 & 163 of the Tornado Workshop Manual

Remove the lower fairing.

Lean the bikes left handlebar against the wall, or drain the oil if you prefer.

Remove the right side engine cover, 8mm hex screws and two 5mm allen head bolts.

Set the cable adjuster on the left handlebar to the halfway point in the adjustment range.

While holding item '1' in the below drawing, undo nut '2'.

With nut '2' back-off, turn shaft '3' in using an allen-key until you feel it 'seat', then back it out ¼ turn.

While holding '1' and '3', tighten nut '2' until tight.

Re-fit the right engine cover - as long as the gasket is not broken, you can reuse it. Sealer is not required, just wipe off any excess oil and make sure it is in place when fitting the screws.

Screw Fitting Order - install the two allen-key bolts first, do them up tight, then back them off 1/8 turn, fit all the others screws and tighten them, then tighten the two allen key bolts.

Fine tune the clutch cable adjuster to your liking.

Re-fill the engine oil and fit the fairing.

Clutch Actuator Arm Recall

(28 June 2006)

From irfuel - 27 June 2006

What about this actuator arm stuff?

How can I check which version is on my bike?

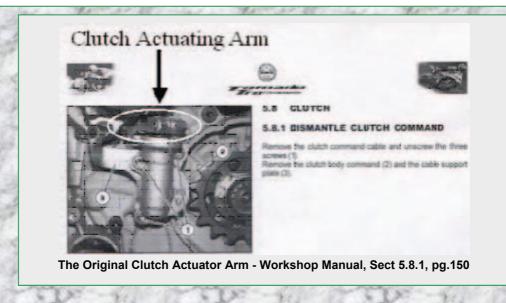
How can I easily spot the difference?

Any pictures anyone?

Reply from Laurence white - 27 June 2006

The clutch actuating arm sits just in front of the front sprocket.

The original one was made of alloy and the modified one is made of steel, and is black in colour.



Rattly Right Side leads to Clutch Gear Failure

(24 November 2006)

This one is nasty. It happened to dean100yz, from the Benelliforum. He posted the following on the 26 April 2006. If the right side of the engine starts to rattle more than usual - STOP. You'll be glad you did.

(before - Ed.)

Hey all. I've been clocking up some miles recently and have noticed something. When I start the bike up from cold the right side (assuming the clutch basket) rattles or at least I think that's what it is. I can only describe it as the sound of a Ducati dry clutch, only not as loud. Once it warms up the noise goes a bit and there's been no loss in power, surges or funny clutch action. However, speaking to a local Benelli dealer, they said its probably the clutch basket and they're prone for going. Has anyone else suffered a problem like this or has similar symptoms?? I'm a little worried on riding until I know for sure, but I've booked to go Isle of Man in June and Silverstone end of May:\

(after - Ed.)

Ah seems the problem was a little worse than I first thought. Something to do with the clutch. Was stuck 70 miles from home today...oh the joy. Still my fault should have had it checked.

(a little later - Ed.)

I've stripped her of all her clothes today including sump, clutch cover etc. The sump plug is magnetic and picked up a good majority of the damaged parts - it was full of metal and swarf.

If anyone develops a loud rattling right side get it repaired - it'll last about 1000 miles tops.

There are a few other symptoms as well as the rattling. The bike was struggling to engage 1st when in neutral. Also the bike can lurch forward even when the clutch is in. I didn't get these, but after speaking to a Benelli guru he said they can also happen.

(later still - Ed.)

I'm 90% through what bits I think broke on the bike. I'm finishing it off tonight. So far the main bit was on pg 155/6 of the workshop manual, section 5.8.7/8 I think its called the primary clutch bell unit. There's 3 gears running on the inside of this (the other side holds the clutch plates). The centre gear has ripped itself to pieces - dean100yz



Suffice to say, you don't want this to happen, so do some-

thing! If your frame number is 297 or lower, check it.

All the early Tornado's (up to frame 297) that came to Australia were supposed to have a lock washer fitted to the alternator coupling retaining bolt, by the selling dealer. Lock washer kits were sent to all of the dealers. Frame numbers above 297 should have been delivered with the lock washer installed at the factory, but it's worth checking it, just for peace of mind. Please note that RS & Limited Edition Tornado's and all TnT Models are not affected

Primary Clutch Bell Unit -Workshop Manual, Sect 5.8.8, pg.156





The OTHER Clutch basket problems

There are 2 other problems associated with the clutch basket. The first, is the original problem. It just wasn't made thick enough, and simply fell apart.

The second, the intermediate gear wasn't strong enough. It developed cracks from the lightening holes to the gear teeth. This was fixed by increasing its width.

How can you tell if you have the upgraded clutch basket? JohnnyO says, that:-

- it has the letter 'J' stamped on the middle gear.
- the old thin gear is 6mm wide, the new improved clutch basket has an 8mm wide gear fitted.

If you need to get one, it has the same part number as the old

How To Reset The Service Flag (27 June 2006)

- Depress the Mode Switch for at least 2 seconds.
- Turn the Main Switch ON.
- Keep the Mode Switch depressed until the Service Flag clears (this could take a while so be patient).

How To Change The Gauge Units - mph/kph & C/F (27 June 2006)

Hold the mode button down for 2 seconds, Then turn the ignition on. You can then select between mph & kph.

Do it again, and you can select between C & F on the temperature scale.

The temperature value in the bottom right of the LCD read-out, is sensed by a thermistor inside the front fairing, to the right of the headlight.

It has been said that the battery for the 03 and 04 Tornado's and 04 and early 05 batteries are not strong enough, the battery specified also fits the R1, so if its powerful enough to turn over a 1000cc four cylinder it should be plenty powerful enough to turn over a 900cc triple, however it seems that a some stage the original owners of Benelli stopped fitting the Yuasa and Fiamm as stated in the workshop manual and went and fitted a lower quality no name item that was useless, in order to save on costs, if your goes get a <u>quality</u> battery, some of the new "gel" type batteries come highly recommended. Tornado and TnT batteries are the same.

Alternative Battery

903 Tornado Tre Battery (updated 28 Sept 2006) Part Number: YT12B-4 Voltage: 12 V Dimensions: 151mm x 70mm x 131 mm Other applicable numbers are, **Power-Sonic**: PT12B-4 115CCA, **GS (JSB)**: GT12B-4, **GS (ZYI)**: GT12B-4, **Motocross**: M6212B, ET12-B4

Yuasa Battery Family: Maintenance Free, Battery Type: YT12B-BS, Voltage: 12, Capacity: 10 Ah, Dimensions: 6" x 2 3/4" x 5 1/8"

Weight: 7.6 lbs. Metric Dimensions: 153mm x 70mm x 130mm, Metric Weight: 13 kg (*Ed.??*), Acid Volume: 0.50, Amps: 1.0, C.C.A.: 125

Westco Battery (aka MK Battery) Battery Family: Maintenance Free, Battery Type: 12V12B-4, Voltage: 12, Capacity: 10 Ah, Dimensions: 6" x 2 3/4" x 5 1/8", Weight: 9.5 lbs., Metric Dimensions: 153mm x 70mm x 130mm, C.C.A.: 175 (Ed. Really?) MK Battery don't ship to Australia, but their distributors do, apparently. These are; Apex Battery USD55.95

"There is a minimum order of \$250 for International Orders. International orders also require that funds are prepaid by Money Order, Cashier's Check, or Wire. Please contact us at help@apexbattery.com for estimated shipping costs. International orders generally requires two to three days additional to process." So you've got to buy 5 of them!

eBatteriesToGo

USD55.95, Unfortunately, for those outside the US ...

"I am sorry but we do not ship outside the U.S. We can ship it to someone in the U.S. and they can then ship it to you. Please let me know if this is a possibility.

Thanks for your inquiry.

Best regards,

Bob"

Thanks Bob

Competition Accessories

Not listed, so you'll need to call. "If you would like to have an order ship outside the continental U.S., please place your order by phone with our ordering department at 1-800-543-8208 so they can give you the exact shipping charges."

(Ed. from Oz, dial 0011 1 800 543 8208 during office hours Mo-Th 0900-2100, Fr 0900-2000, Sa 1000-1600, US Eastern Std Time L called Mason, who said they do indeed ship abroad, but the shipping cost can only be determined between 0900-1700

Time. I called Mason, who said they do indeed ship abroad, but the shipping cost can only be determined between 0900-1700 EST. Current cost of the 12V12B-4 is USD62.99, and he'll email the shipping cost when it is available. Mason also confirmed that the CCA is 175A.

Yacht /Himura Batteries

Model: CT12B-4 Sealed Battery, www.motorcyclebatteriesus...battery=86, The powerful sealed and maintenance-free Yacht/ Himura CT12-B4 is a value packed battery designed specifically for today's high performance powersport vehicles. Meets or exceeds all OE battery requirements. The CT12B-4 replaces the Yuasa YT12B-BS or the GS GT12B-4 sealed battery. It's sealed agm design features no maintenance, zero corrosion and long service life. Shipped precharged and ready to install. Specifications * Sealed non-spillable AGM design, * Maintenance-free, * 12 volt 9.5 Ah 135 cold cranking amps, * Replaces Yuasa YT12B-BS sealed battery, * Replaces GS GT12B-4 sealed battery, * 12 month warranty, * Shipped pre-charged and ready to install

KnowALittle (Benelliforum contributer - ed.)

13 Apr 2006, I have fitted a YTZ14-BS to my bike which ups the amps but still (with a slight squeeze) fits in the space provided by Mr Benelli. *Sealed non-spillable AGM battery, *Maintenance-free, *12 volt 11.2 amp hour, *145 cold cranking amps, *6"L x 3 7/16"W x 4 3/8"H (153x87x111)

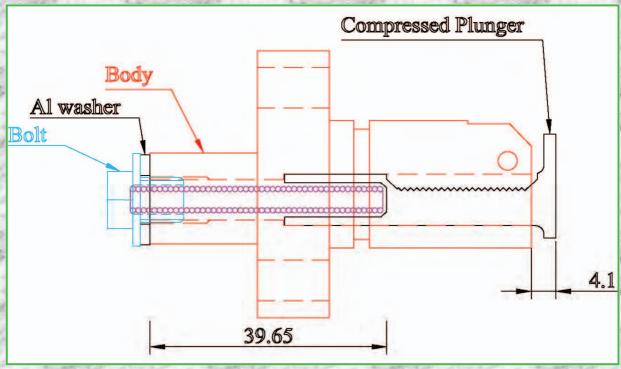
If 153x87x111 fits, and the std battery is 153x70x130, then you'd think that 153x87x130 should fit also --- ie. just 17mm deeper than standard, but it won't! The available space is not square.

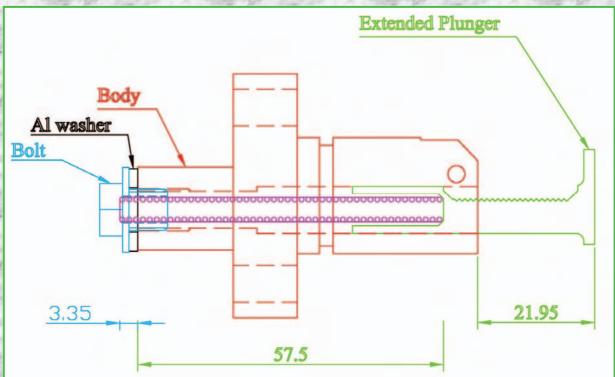
(These dims are those of a YTX12-BS or PTX12-BS, which has 180CCA - nice if it would fit! - ed.)

Cam Chain (24 Nov 2006)

Here's some food for thought, ladies & gents. I went up to Sydney to catch up with Tax the other week, and came back with the dimensions of the cam chain tensioner from his broken 900. I've drawn up the unit in both fully compressed (new chain) and fully extended (buggered chain) positions - see below - they're scale drawings. If you look at the measurements for the spring, you'll see that it doesn't quite add up.

Exploded view of the cam chain tensioner - fully compressed.





Taksil's Cam Chain Tensioner Parameters. Compressed spring length = 37.1 mm. Free spring length = 57.5 mm. constant (k) = 3295 N/m. 40 turns of 0.9 section wire x 4.65 diameter. Force required to overcome the ratchet = 430gms (4.2N). Spring compression required to produce 4.2N is 1.3mm. (O-ring is 19 mm ID x 1.9 mm section.)

What should the spring length be?

Minimum Free Spring Length = Length to overcome ratchet + bolt bore depth + maximum plunger depth = 1.3 + 3.3 + 57.5 = **Minimum Free Spring Length** = **62.2 mm**.

Hmmm, perhaps not.

If it were 62.2mm, it would be putting an awful lot of pressure on the chain and guide, when they are new, wearing them unduly. In fact, the spring only really needs to be long enough to keep pressure on the chain for 25,000 kms. Or even simpler, until you check it next time. The User Manual says, in the table on the page marked 56 (actually 30 of 48), that the timing chain should be inspected every 5000 km, and replaced every 25,000 km. The "Timing Chain Stretcher" (unfortunate name) should be inspected every 10,000 km. Of course, the manual doesn't tell you how to inspect either the chain or the tensioner. So, let's work it out. The spring will continue to adjust the chain tension until the plunger depth reaches:-

Max. Operating Depth	=	Spring Length	-]	Spring length to provide force to	-	bolt bore depth
	=	Spring Length	-		1.3	-	3.3
Max. Operating	=	Spring Length	-		4.6		

For what it's worth here's how I reckon you should check the Cam Chain Tensioner. Measure the spring length, then the plunger depth, and apply the following formula; **Spring Length > Plunger Depth + 4.6.** If that is TRUE, check it again next service, and repeat every 5000 km. If it is FALSE, stretch the spring until it is long enough to make the relationship TRUE. Alternatively, have Benelli send you one that IS long enough. Better yet, do both. That way you won't be out of action for 6 months.

To Check The Tensioner Travel

- locate the tensioner.

It's on the right rear of the engine block. On the Tornado, you can see it just below the top right fairing panel and the air duct.

- remove the bottom right fairing panel, to allow access to the tensioner central bolt.
- remove the central bolt from the tensioner with a 10mm ring spanner.
- remove the spring.
- measure the depth of the plunger from the body bolt face. Use a length of 1mm copper wire (about 100mm). Carefully feed it into the body until it touches the plunger bore. (Not the edge.) Don't push hard, or the plunger will advance on the ratchet and tighten the chain more than is necessary. That will take about 430 gm, or about 1lb force. Grip the wire with a pair of long nose pliers, flush with the bolt face, and remove the wire. Measure from the pliers to the tip. It should be between 39.7 & 57.5 mm



A warning from Colin

"Just a note if you are doing the tensioner check. My bike is an R S. The spring sticks out a fair bit more than Engenia found, so put some rags around, and support it as you remove the nut, or you may drop it down the back of the engine... when I put it back, I pushed the nut in with one hand, and held it pushed in, and used long nose pliers to start the thread, griping on the wider part next to the flats.." Good point Colin. From what I'm seeing from the responses I'm getting, the springs vary in length, so be prepared for this. **Mine, at 24,000 km.** Plunger depth = 48.5 mm. Free spring length = 54.5 mm (This is shorter than Taksil's!!!!) Spring Length > Plunger Depth + 4.6 ? 54.5 > 48.5 + 4.6 (= 53.1) **TRUE** (1.3 mm left - phew!) **What's yours?**No, really. What **IS** yours? Please let me know. I would like to see just how varied these springs are. Taksil's and mine are 3mm different. Mine's shorter, and his died. Go figure? I would also like to know how close to the edge we all are, and if there is a trend dependant on the year of manufacture. By the way, reassemble the tensioner in the reverse order. It'll work better if it's put back together. Please contact Eugenia via the www.benelliforum.com forum the following details. (Cut and past. It'll be quicker.)

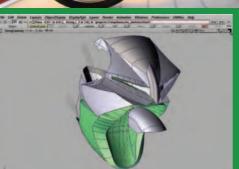
First Name: Last Name: City: State: Country: Benelli Model: Year Of Manufacture:(10th character of your VIN) Odometer Reading: miles/kilometers?: Free Spring Length (mm): Plunger Depth (mm):

But is it Art?, Here's THE section for readers to contribute any photo's they may have, anything and everything is welcome, err, bike wise that is. They Barbie doll below apparently has taken quite a shine to Johnny Rotten's Tornado Tre at a event in the UK, according to Johnny "One for the books... The bike is my pride and joy Benelli Tornado Tre Limited Edition, while the lovely lady on top of it is Brooke Lee.. While Johnny MAY be able to coax a naive pneumatic lady onto his bike, we can see that he has yet to master the use of a rear wheel stand correctly, either that or his brain stopped working in the presence of the front end heavy thing on the stand...the bike.. The bike!:-)





The editor 's RS gets delivered to the office, signing for this baby was a absolute pleasure :-)



Some rare factory photo's of the Tornado undergoing its initial clay modelling via a computer operated mill, hard to believe this avant garde design was penned back in 1997! Thank you Adrian!











